

What is claimed is:

1. A liquid ejecting apparatus comprising
a carriage that reciprocates in a main scanning direction,
a liquid ejecting head mounted on the carriage, having a plurality
of head-liquid-supplying ports and a plurality of nozzles, and
a sub-tank member mounted on the carriage, having a plurality
of liquid-storing-room openings that are respectively communicated with
the plurality of head-liquid-supplying ports of the liquid ejecting head,
wherein
the sub-tank member is formed as a single integral member,
each of the plurality of liquid-storing-room openings is closed by
an elastic partition having a predetermined area in order to form a liquid
storing room,
the plurality of liquid-storing-room openings are respectively
communicated with a plurality of liquid-communication ways provided in
the sub-tank member, and
the plurality of liquid-communication ways are respectively
communicated with a plurality of sub-tank-liquid-supplying ports
provided at an outside of the sub-tank member.
2. A liquid ejecting apparatus according to claim 1, wherein
the plurality of liquid-storing-room openings have bottoms.
3. A liquid ejecting apparatus according to claim 2, wherein
all the plurality of liquid-storing-room openings are provided on
one side of the sub-tank member.
4. A liquid ejecting apparatus according to claim 3, wherein
opening surfaces of the plurality of liquid-storing-room openings
are located in a common flat plane.
5. A liquid ejecting apparatus according to any of claims 2 to 4,
wherein
all the plurality of liquid-storing-room openings are closed by a
common elastic partition.

6. A liquid ejecting apparatus according to any of claims 1 to 5, wherein

a part of each of the plurality of liquid-communication ways is formed by a liquid-communication-way opening formed in the sub-tank member and an elastic partition closing the liquid-communication-way opening.

7. A liquid ejecting apparatus according to claim 6, wherein the plurality of liquid-communication-way openings are formed in parallel grooves.

8. A liquid ejecting apparatus according to claim 6 or 7, wherein all the plurality of liquid-storing-room openings and all the plurality of liquid-communication-way openings are closed by a common elastic partition.

9. A liquid ejecting apparatus according to claim 6 or 7, wherein all the plurality of liquid-storing-room openings are closed by a common first elastic partition, and all the plurality of liquid-communication-way openings are closed by a common second elastic partition.

10. A liquid ejecting apparatus according to any of claims 1 to 9, wherein

the plurality of sub-tank-liquid-supplying ports are gathered.

11. A liquid ejecting apparatus according to any of claims 1 to 10, wherein

the elastic partition closing each of the plurality of liquid-storing-room openings is arranged in parallel with the main scanning direction.

12. A liquid ejecting apparatus according to any of claims 1 to 11, wherein

the elastic partition closing each of the plurality of

liquid-storing-room openings is arranged substantially horizontally.

13. A liquid ejecting apparatus according to claim 1, wherein the plurality of liquid-storing-room openings are through openings.

14. A liquid ejecting apparatus according to claim 13, wherein opening surfaces on one side of the plurality of liquid-storing-room openings are located in a common first flat plane, opening surfaces on the other side of the plurality of liquid-storing-room openings are located in a common second flat plane, and

the first flat plane and the second flat plane are parallel with each other.

15. A liquid ejecting apparatus according to claim 13 or 14, wherein opening surfaces on one side of the plurality of liquid-storing-room openings are closed by a common first elastic partition, and

opening surfaces on the other side of the plurality of liquid-storing-room openings are closed by a common second elastic partition.

16. A liquid ejecting apparatus comprising a carriage that reciprocates in a main scanning direction, a liquid ejecting head mounted on the carriage, having a plurality of head-liquid-supplying ports and a plurality of nozzles, and a sub-tank member mounted on the carriage, having a plurality of liquid-storing-room openings that are respectively communicated with the plurality of head-liquid-supplying ports of the liquid ejecting head, wherein

each of the plurality of liquid-storing-room openings is closed by an elastic partition having a predetermined area in order to form a liquid storing room,

the plurality of liquid-storing-room openings are respectively communicated with a plurality of liquid-communication ways provided in

the sub-tank member,

the plurality of liquid-communication ways are respectively communicated with a plurality of sub-tank-liquid-supplying ports provided at an outside of the sub-tank member, and

the plurality of sub-tank-liquid-supplying ports are gathered.

17. A liquid ejecting apparatus according to any of claims 1 to 16, wherein

the elastic partition is formed by a synthetic resin film.

18. A liquid ejecting apparatus according to claim 17, wherein

the synthetic resin film is a polyphenylene-sulfide film or a polyimide film.

19. A liquid ejecting apparatus according to any of claims 1 to 18, wherein

at least one of the liquid storing rooms and the liquid communication ways has a valve mechanism that is opened by a negative pressure caused by liquid reduction.

20. A sub-tank member comprising

a plurality of liquid-storing-room openings that are respectively communicated with a plurality of head-liquid-supplying ports of a liquid ejecting head,

a plurality of liquid-communication ways that are respectively communicated with the plurality of liquid-storing-room openings, and

a plurality of sub-tank-liquid-supplying ports that are respectively communicated with the plurality of liquid-communication ways,

wherein

each of the plurality of liquid-storing-room openings is closed by an elastic partition having a predetermined area in order to form a liquid storing room,

the sub-tank member is mounted on a carriage that reciprocates in a main scanning direction, and

the sub-tank member is formed as a single integral member.

21. A sub-tank member comprising
 - a plurality of liquid-storing-room openings that are respectively communicated with a plurality of head-liquid-supplying ports of a liquid ejecting head,
 - a plurality of liquid-communication ways that are respectively communicated with the plurality of liquid-storing-room openings, and
 - a plurality of sub-tank-liquid-supplying ports that are respectively communicated with the plurality of liquid-communication ways,

wherein

each of the plurality of liquid-storing-room openings is closed by an elastic partition having a predetermined area in order to form a liquid storing room,

the sub-tank member is mounted on a carriage that reciprocates in a main scanning direction, and

the plurality of sub-tank-liquid-supplying ports are gathered.